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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 030,105	05 14 2002	Kazunori Saegusa	020047	2106

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EXAMINER

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 04/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,105

Applicant(s)

SAEGUSA ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 6) ☐ Other: _____

The material starting in applicants' specification at page 3 line 1 appears to mirror the claims and contains what appears to be 2 paragraphs numbered 1-20. While the disclosure starting at page 20 appears to be somewhat disjointed from the rest of the specification and is awkward, it appears to be part of the disclosure and applicants do not appear to be presenting claims. Applicants may redraft this section of the specification if they wish. However this is not a requirement.

Applicants' Abstract is not in the form of a single paragraph. Correction is required.

Paragraphs 1-20 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The term "ratio" as it appears in the claims makes no sense given that a ratio implies relative amount of two different quantities but no such pairs of quantities are recited by the instant claims. It is suggested that the phrase "at a ratio" be replaced with --in an amount-- if that is what is intended.

The term "particle size" or "mean particle size" is unclear given that particle sizes exist as a distribution. Therefore it is necessary to qualify the particle sizes as a type of distribution, namely volume or weight average or number average particle size. However applicants' claims do not recite the type

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of distribution of particle sizes intended and are therefore unclear. Since particle sizes vary depending on the type of distribution intended, applicants' particle sizes are unclear.

The term "occupies" implies the presence in a volume of space or area such as does not appear to be applicants' intention in the claims. It is suggested that the term "occupies" in the claims be replaced with "contains" if that is what is intended.

Claim 19 makes no sense since it refers to "composition described in above-described 1" without reciting what the above described is. If applicants intend that the above described 1 is claim 1 then applicants should insert the word --claim-- before the word "1". Claim 20 is similarly defective.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

An invention shall be entitled to a patent unless --

(1) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not actually disclosed or described as set forth in section 102 of this title, if the differences between the subject

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...sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. The novelty shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fleischer et al. (USP 5,256,733).

Fleischer et al. disclose a composition containing two different populations of methyl methacrylate grafted polybutadiene rubber of particle sizes 0.1 microns and 0.45 microns. Note Example 12 and Table 1 and that the smaller particles are present in a major amount by weight, i.e. greater than 50% based on the amount of the two particles. Note column 8 lines 1-4 where it is disclosed that the particle size distributions are weight average at column 5 lines 5-10. If applicant's particle size distributions are volume average particle size, then it would appear that Fleischer et al. reasonably anticipate the claims but in any case patentees disclosed that the particle sizes may be lower and higher at column 43-60 and would therefore appear to embrace applicant's particle sizes even if applicants' particle sizes are other than volume average particle sizes.

Since the reference discloses all the limitations of a claim except for property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties

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which anticipate or render obvious the claimed invention, basis existing, shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980) MPEP § 2112-2112.02.

Claims 1-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shigeto (JP 06-240100, cited by applicants).

Shigeto et al. disclose a composition containing two graft copolymers in which 0-20 weight percent of another vinyl monomer "c" is grafted to rubbery polymers. Note the abstract. Note the examples in the patent which in all cases contain a small graft particle within the metes and bounds of applicants' small graft particle and another large graft particle which is within the metes and bounds of the particle size of applicants' larger grafted particle. Note also that while Example B-16 discloses a grafted particle in which the graft shell containing methyl methacrylate, there are no specific examples in which B-16 is combined with another graft copolymer in which the graft shell is also methyl methacrylate or methyl methacrylate containing as required by applicants' claims. However note that paragraph 26 of the patent discloses that methyl methacrylate may be present as in the grafting component "b" and therefore patentees disclose that methyl methacrylate may be a component for both graft shells as required by the instant claims.

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It would have been obvious to a practitioner having ordinary skill in the art at the time of the invention to use methyl methacrylate in both graft shells, i.e. to graft rubbers with methyl methacrylate based on the teachings of Shigeto et al. since Shigeto et al. specifically discloses that this may be done and in the expectation of adequate results absent any showing of surprise or unexpected results.

With regard to the references indicated as being in the "X" category these references do not teach or suggest applicants' combination of amounts of components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Mullins whose telephone number is (703) 308-2820. The examiner can normally be reached on Monday-Friday from 9:30 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached at (703) 308-2462. The fax phone number for this Group is before final (703) 872-9310 and after final (703) 8729311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

J. M. Mullins

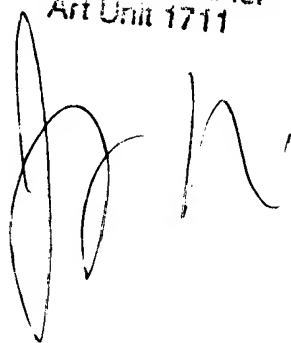
Serial 10/030,105

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April 03

Primary Examiner
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A handwritten signature in black ink, consisting of a large, stylized 'h' followed by a smaller 'n'.